



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink-L26

**Issued:** 12 May 2021 / 0800L (1200Z)

**Valid:** 15 May 2021 / 1824 – 1925L (2224 – 2325Z)



**Forecast Discussion:** A wet and stormy pattern will be in place for the next several days as a front slowly approaches central Florida from the north and stalls out over the area tomorrow. However, by Friday a weak wave of low pressure will develop along the front, helping to push the boundary well south of the Spaceport by Saturday. This will allow an area of strong high pressure centered over the mid-Atlantic states to take control of our weather. With the high centered well to our north and the front to our south, a relatively strong pressure gradient will create a breezy, onshore flow over the weekend. Because of this, a brief low-topped, onshore moving shower cannot be ruled out, but very dry air in the mid-levels combined with sinking air behind the sea breeze should limit their growth to be nothing more than a flight-through constraint. Therefore, the main concerns for Saturday's attempt are liftoff winds and the Cumulus Cloud Rule.

For Sunday, we will see very similar conditions as the high pressure slowly slides southeast and remains in control. Winds will shift slightly more to the east and will remain breezy. Similarly to Saturday, sinking, dry air in the mid-levels will continue to limit the growth of any onshore moving showers that are able to develop coming off the Atlantic. Thus, the main concerns will remain liftoff winds and the Cumulus Cloud Rule.

Launch Day	Probability of Violating Weather Constraints						
	30%	Primary Concerns: Liftoff Winds, Cumulus Cloud Rule					
	Weather Conditions					Additional Risk Criteria	
	Weather/Visibility:	Iso'd Showers / 7 mi.	Clouds				Upper-Level Wind Shear: Low
			Type	Coverage	Base (ft)	Tops (ft)	
24-Hour Delay	Temp/Humidity:	74°F / 75%	Cumulus	Scattered	3,000	9,000	Booster Recovery Weather: Low
	Liftoff Winds (200'):	060° 17 - 22 mph					Solar Activity: Low
	Probability of Violating Weather Constraints						
	30%	Primary Concerns: Liftoff Winds, Cumulus Cloud Rule					
	Weather Conditions					Additional Risk Criteria	
	Weather/Visibility:	Iso'd Showers / 7 mi.	Clouds				Upper-Level Wind Shear: Low
			Type	Coverage	Base (ft)	Tops (ft)	
	Temp/Humidity:	75°F / 70%	Cumulus	Scattered	3,000	7,000	Booster Recovery Weather: Low
	Liftoff Winds (200'):	070° 17 - 22 mph	Cirrus	Scattered	26,000	29,000	Solar Activity: Low
	<b>Note:</b> The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.						
Next Forecast Will Be Issued		13 May 2021					